

SCALE

1:5

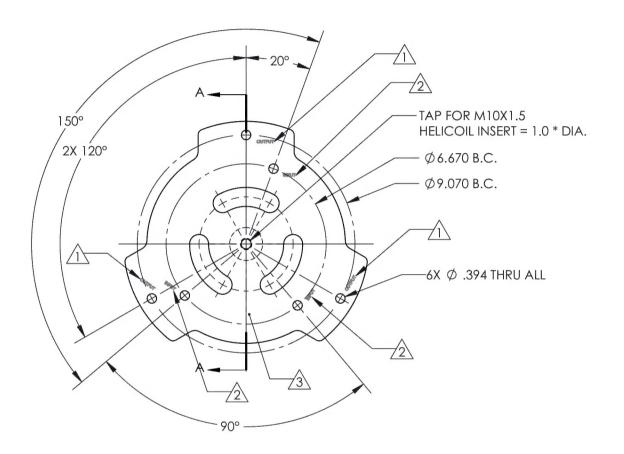
12/1/2015

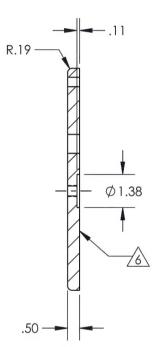
SHEET 1 OF 11

ASSY -23

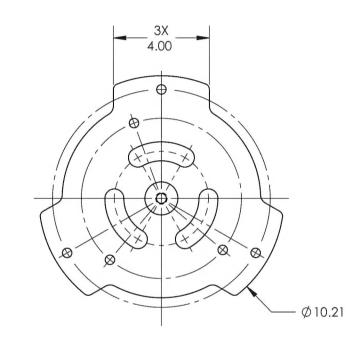
	REVISIONS								
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED				
2	16-0049	-1 REDESIGNED ADDED FEATURE Ø1.38 ₹.11.	3/10/2016	RJC	JAG				
3	16-0086	-1 CH'D DIM WAS R.20 IS R.19.	7/21/2016	SM	JAG				











## NOTES:

MACHINE ENGRAVE "OUTPUT", FILL WITH INK.

MACHINE ENGRAVE "INPUT", FILL WITH INK.

3 INK STAMP T/N, S/N, "MADE IN USA"

4. USE CAD DATA TO MANUFACTURE.

5. DUAL FINISH:

1ST. CLEAR ANODIZE, MIL-A-8625, TYPE II, CLASS I. 2ND. POWDER COAT YELLOW, FED #13538.

NO POWDER COAT THIS SURFACE.



IGB OUTPUT SEAL EXCHANGE

RBEM653V3004101-1 UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX ± .01 ANGLES ± .5°

X. ± .1 SURFACES = 125/

1. BREAK ALL SHARP EDGES

.015 x 45° OR .015R

2. DIMENSIONAL HIMTS ARBLY MAT'L 6061 HEAT TREAT FINISH SEE NOTE 5 DRAWN BY: DUERFELDT 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY **USED ON MODEL** APPROVED: J Gilbert H175 SCALE DATE 12/1/2015 1:4 SHEET 2 OF 11

(-1)

LID

REVISIONS This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR. DESCRIPTION APPROVED REV ECR DATE INITIAL 16-0049 -3 CH'D DIM WAS 1.59 IS 1.69 3/10/2016 RJC JAG -Ø .083 THRU ALL <sup>−</sup>M8x1.25-6g <u>∕2</u>\ -THREAD RELIEF THREAD RELIEF .68 Ø .80  $\emptyset.5-$ <sup>-</sup>M6x1.0-6g <u>/2</u>\ **CENTERS** PERMITTED .55 .18 --- .60 1.69 - 1.02 6.41 **NOTES:** 1. DUAL FINISH: 1ST: ZINC PLATE, ASTM B633 TYPE 1 SC2. 2ND: POWDER COAT YELLOW, FED #13538. NO POWDER COAT THIS SURFACE. IGB OUTPUT SEAL EXCHANGE RBEM653V3004101-3 3 MAT'L 4140/4142 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .005 FRACTIONS ± 1/8 TREAT FINISH SEE NOTE 1 .XX ± .01 .X ± .1 ANGLES ±.5° SURFACES = 125/ SPEC 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 DRAWN BY: DUERFELDT CHECKED: CLOUGH OPPS APPR: (-3)ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT

**STUD** 

H175

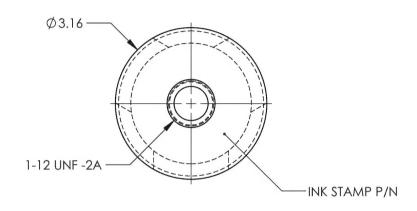
SHEET 3 OF 11

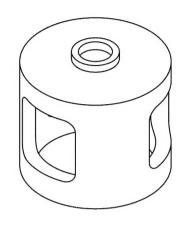
12/1/2015

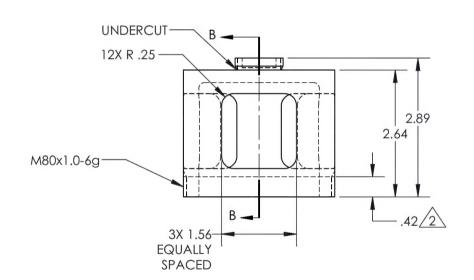
SCALE

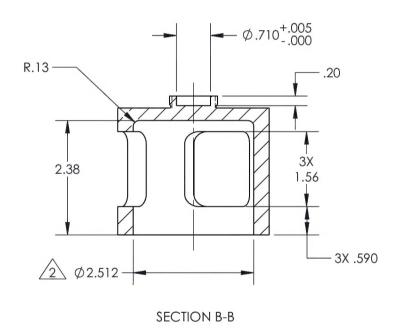
1:1

REVISIONS REVISIONS								
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED			
2	16-0049	-5 CH'D DESIGN DELETED 1/4-28 UNF -2B LH $\Psi$ .09, DELETED DETAIL B, ADDED DIM Ø.710 +.005000 $\Psi$ .20. ADDED THREAD CALLOUT 1-12 UNF -2A. CH'D DIM WAS 3.03 IS 2.89.	3/10/2016	RJC	JAG			









NOTES:

1. DUAL FINISH:

1ST: ZINC PLATE, ASTM B633 TYPE 1 SC2.
2ND: POWDER COAT YELLOW, FED #13538.

2 NO POWDER COAT THIS SURFACE.

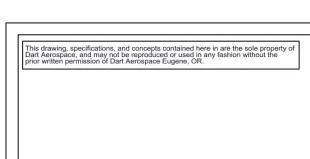


GB OUTPUT SEAL EXCHANGE

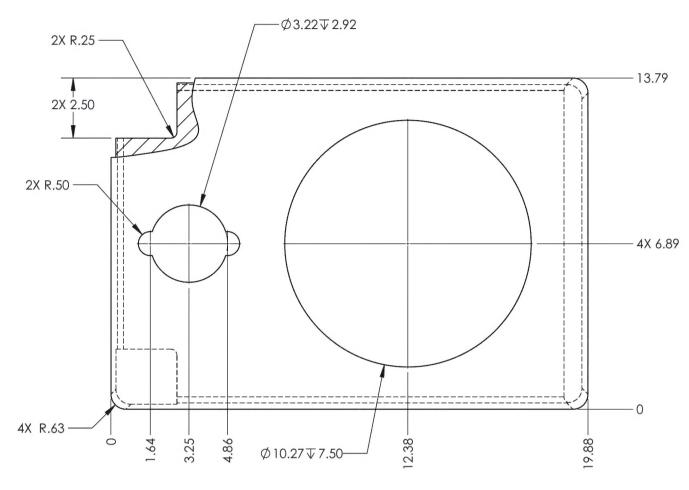
DWG NO.	RBEA	165	/300410	3		
MAT'L 4140/4142 HEAT TREAT				UNLESS DIMEI .XXX ± .005 .XX ± .01		
				.x ± .1	L SHARP EDGES	25/
DRAWN BY: CHECKED:	DUERFEL CLOUGE	1		2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER		
OPPS APPR: ANDERSON QA APPR: LINDSAY			ASME Y14.5M-2009  USED ON MODEL			
APPROVED: GILBERT			H175			
SCALE	4.0	ATE	12	/1/2015	CHEET 4 OF	11

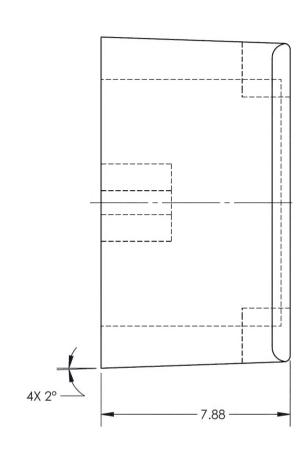


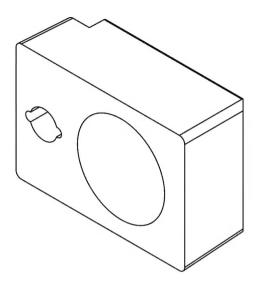
GUIDE

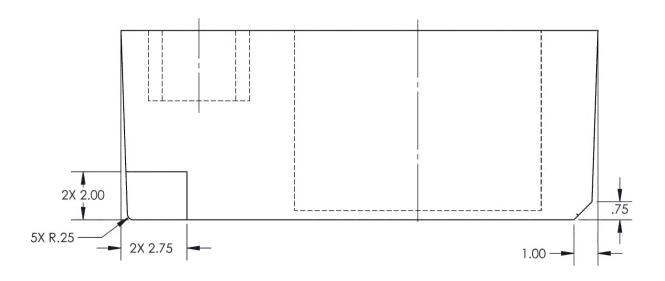


REVISIONS								
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED			
2	16-0049	-15 CH'D CUTOUT FOR REDESIGNED TOOL.	3/10/2016	RJC	JAG			
3	16-0086	-15 ADDED FINGER GRABS.	7/21/2016	SM	JAG			









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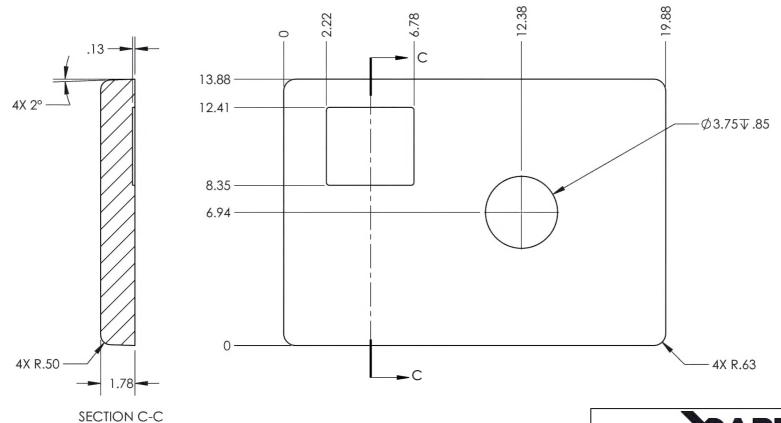
BOTTOM TOOL CUSHION

2	AFROSI	RT.
OLITPLIT	CEVI	EV

IGB OUTPUT SEAL EXCHANGE

Divo ito.	RBEA	<i>1</i> 650	3V	300410	11-15	3		
MAT'L ETHAF	MAT'L ETHAFOAM 220, BLACK				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 ANGLES ±1° ANGLES ±1°			
HEAT TREAT	TREAT FINISH 7.88 X 13.79 X 19.88 (I.R. SPE							
SPEC					SURFACES = 1	25/		
				1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY				
DRAWN BY:	DUERFE	LDT						
CHECKED:	CLOUG	Н		AFTER PLATING  3. INTERPRET DIM AND TOL PER				
OPPS APPR:	ANDERS	SON		ASME Y14.				
QA APPR:	QA APPR: LINDSAY APPROVED: GILBERT				USED ON MODEL			
APPROVED:				H175				
SCALE	1:4	DATE	12	/1/2015	SHEET 5 OF	11		

	REVISIONS									
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED					
2	16-0049	-17 CH'D CUTOUT FOR REDESIGNED TOOL.	3/11/2016	RJC	JAG					



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TOP TOOL CUSHION

## DART

IGB OUTPUT SEAL EXCHANGE

UNLESS OF HERWISE SPECIFIED

MINENSIONS ARE IN INCHES

.XXX ± .010 FRACTIONS ± 1/8

.XX ± .03 ANGLES ± 10

.X ± .1 SURFACES = 125/

1. BREAK ALL SHARP EDGES

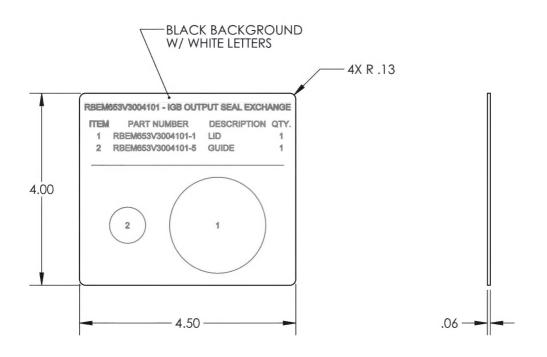
.015 × 45° OR .0158

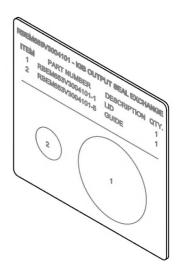
 QA APPR:
 LINDSAY
 USED ON MODEL

 APPROVED:
 GILBERT
 H175

 SCALE
 1:5
 DATE
 12/1/2015
 SHEET 6 OF 11

	revisions								
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED				
2	16-0049	-19 CH'D TOOL DESIGN, DELETED RBEM653V3004101-9.	3/11/2016	RJC	JAG				





<u>NOTE:</u> USE PDF.

## DART

"IGB OUTPUT SEAL EXCHANGE

DWG NO.

RBFM653V3004101-19

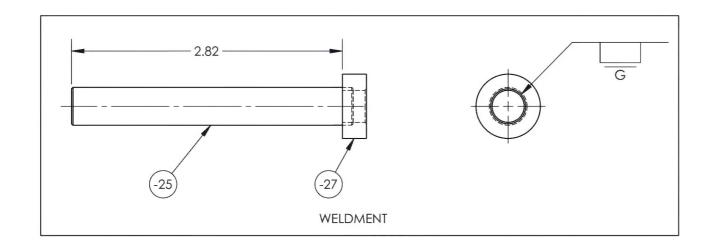
REV 2

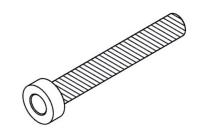
	KDEN	1100	<i>S</i> v	300410	71-17	2	
MAT'L PLAS	TIC				S OTHERWISE SPECIF NSIONS ARE IN INCHE		
HEAT TREAT				.XXX ± .010 FRACTIONS ± 1/8			
FINISH				.XX ± .03	ANGLES ±1° SURFACES = 1	25/	
SPEC	,			1. BREAK AL	L SHARP EDGES	$\overline{V}$	
DRAWN BY:	DUERFE	LDT		.015 x 45° C	OR .015R NAL LIMITS APPLY		
CHECKED:	CLOUG	Н		AFTER PLA	ATING		
OPPS APPR:	ANDERS	ON		ASME Y14.	T DIM AND TOL PER 5M-2009		
QA APPR:	LINDSA	Υ			USED ON MODEL		
APPROVED:	GILBER	RT T			H175		
SCALE	1:2	DATE	12	/1/2015	SHEET 7 OF	11	

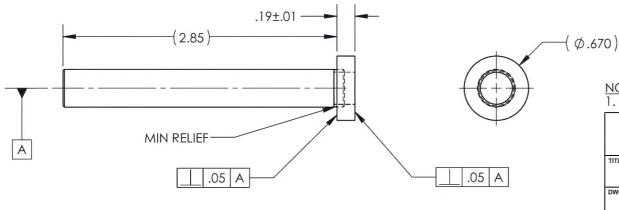
(-19

CONTENTS PLACARD

	REVISIONS									
REV	ECR	DATE	INITIAL	APPROVED						
2	16-0049	-23 ADDED PART & DWG.	3/10/2016	RJC	JAG					
3	16-0086	-23 ADDED SEPERATE WELDMENT AND MACHINING SKETCHES. ADDED GD&T LIMITS.	7/21/2016	SM	JAG					







NOTES:

1. COMPLETE WELDMENT BEFORE MACHINING.

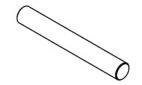
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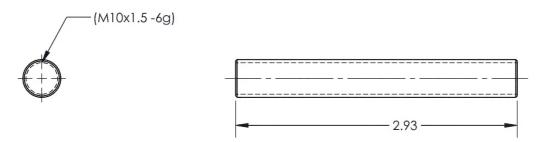
GB OUTPUT SEAL EXCHANGE

102 0011 0	1027 (2 27(01)) (11(02
RBEM 6	\$53V3004101-23
MAT'L	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH ZINC PLATE	.XX ± .03 ANGLES ±1° .X ± .1 SURFACES = 125/
SPEC ASTM B633 TYPE I SC	1. BREAK ALL SHARP EDGES
DRAWN BY: CLOUGH	.015 x 45° OR .015R

FOOT WELDMENT

	REVISIONS REVISIONS								
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED				
2	16-0049	-25 ADDED PART & DWG.	3/10/2016	RJC	JAG				







"IGB OUTPUT SEAL EXCHANGE

NG NO. RBE

RBEM653V3004101-25

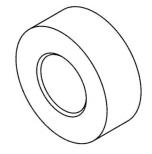
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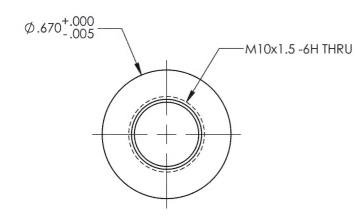
MAT'L STEEL				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
HEAT TREAT				.XXX ± .010 FRACTIONS ± 1/8				
TREAT FINISH SEE -23				.XX ± .03	ANGLES ±1° SURFACES = 125/			
SPEC				1. BREAK ALL SHARP EDGES				
DRAWN BY:	CLOUGH			.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY				
CHECKED: DUERFELDT			AFTER PLATING					
OPPS APPR: ANDERSON			3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009					
QA APPR:	LINDSAY			USED ON MODEL				
APPROVED:	GILBERT			H175				
SCALE	1:1	DATE	3/	9/2016	SHEET 9 OF 11			

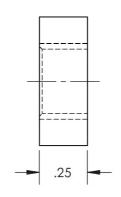
-25)

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REVISIONS REVISIONS							
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED		
2	16-0049	-27 ADDED PART & DWG.	3/10/2016	RJC	JAG		
3	16-0086	-27 CH'D DIM WAS .19 IS .25.	7/21/2016	SM	JAG		









IGB OUTPUT SEAL EXCHANGE

DWG NO.

RBEM653V3004101-27

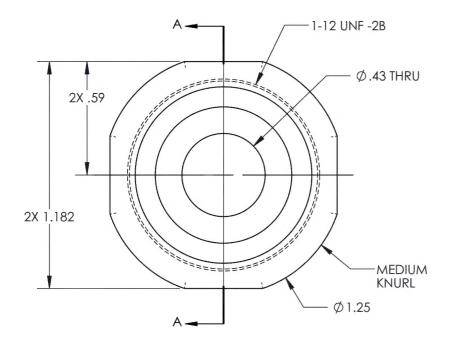
REV 3

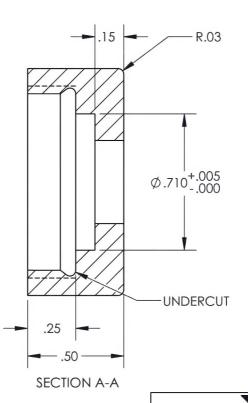
					0		
MAT'L 4140/4142 Q & T				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8			
HEAT TREAT							
FINISH SEE -23				.XX ± .01 .X ± .1	ANGLES ±.5° SURFACES = 125/		
SPEC				1. BREAK ALL SHARP EDGES			
DRAWN BY:	CLOUGH	CLOUGH			OR .015R		
CHECKED:	DUERFE	DUERFELDT			DIMENSIONAL LIMITS APPLY AFTER PLATING     INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
OPPS APPR:	ANDERS	ANDERSON					
QA APPR:	LINDSAY			USED ON MODEL			
APPROVED:	GILBERT			H175			
SCALE	2:1	DATE	3/	9/2016	SHEET 10 OF 11		

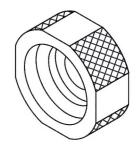
-27)

FOOT

REVISIONS							
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED		
2	16-0049	-29 ADDED PART & DWG.	3/10/2016	RJC	JAG		
3	16-0086	-29 ADDED WRENCH FLATS.	7/21/2016	SM	JAG		







PART

TGB INPUT SEAL EXCHANGE

DWG NO.

RBEM653V3004101-29

REV 3

MAT'L 4140/4142 Q & T			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
HEAT TREAT			.XXX ± .005 FRACTIONS ± 1/8				
TREAT FINISH ZINC PLATE			.XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125/				
SPEC ASTM B633 TYPE I SC 2			1. BREAK ALL SHARP EDGES				
DRAWN BY:	CLOUGH			.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY			
CHECKED: DUERFE		LDT		AFTER PLATING  3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009			
OPPS APPR: ANDERS		NOS					
QA APPR: LINDSAY		′		USED ON MODEL			
APPROVED: GILBERT		Γ		H175			
SCALE 2:1		DATE	12	/1/2015	SHEET 11 OF 11		

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